

Addendum to the Fact Sheet for NPDES Permit No. WA0052175

APRIL 18, 2016

1. General Information

Facility: **Chelan PUD # 1
Peshastin Publicly-Owned Treatment Works
10395 Mill Road
Peshastin, WA 98847**

2. Application and Compliance Review

The Peshastin Publicly Owned Treatment Works (Peshastin) submitted an application to Ecology on May 15, 2014 for permit reissuance, and Ecology accepted it on May 16, 2014. Ecology reviewed inspections and assessed compliance of the facility's discharge with the terms and conditions in the previous permit. Ecology has sufficiently reviewed the application, discharge monitoring reports, and other facility information in enough detail to ensure that:

- Peshastin has substantially complied with all of the terms, conditions, requirements and schedules of compliance of the expired permit. During the course of the 5-year permit term Peshastin received 4 violations; one for late submittals, one missing one analysis and two late reports.
- Ecology has up to date information on the facility's waste treatment practices, the facility's production levels; and the nature, content, volume, and frequency of its discharge.
- The discharge meets applicable effluent standards and limits, water quality standards, and other legally applicable requirements.
- Peshastin has submitted the Peshastin/Dryden Facility Plan prepared by Gray and Osborne, Inc. It was approved by Ecology on September 22, 2015. The plan outlines the improvements to the SBR treatment train to equalize pH, chemical addition to precipitate phosphorus, and filtration. Solids handling and upgrades to the electrical system and controls are also called for. The engineering report is not available at this time.

Since the issuance of the current permit, Ecology has not received any additional information, which indicates that environmental impacts from the discharge warrant a complete renewal of the permit. Therefore, Ecology chose to reauthorize this permit.

3. Permit Reauthorization

When Ecology reauthorizes a discharge permit it essentially reissues the permit with the existing limits, terms and conditions. Alternatively, when Ecology renews a permit it re-evaluates the impact of the discharge on the receiving water, which may lead to changes in the limits, terms and conditions of the permit.

The permit reauthorization process, along with the renewal of high priority permits, allows Ecology to reissue permits in a timely manner and minimize the number of active permits that have passed their expiration dates. Ecology assesses each permit that is expiring and due for reissuance and compares it with other permits due for reissuance when it plans its workload for the upcoming year.

In response to comply with The Wenatchee River Multi-Parameter Total Maximum Daily Load (TMDL) – Dissolved Oxygen and pH, Peshastin has submitted engineering documentation for an upgrade designed to accept wastewater from another Chelan PUD #1 Wenatchee River community, Dryden and provide phosphorus removal for both communities. The engineering has not been approved as of this writing, March 2015. All construction must be completed sometime before the TMDL effective date. Ecology, once construction is completed and all improvements are online, Ecology will consider either issuing a permit modification, new permit at that time, or allow for monitoring of performance and reissuing the permit in 2020. The TMDL requires stringent effluent discharge limits on total-phosphorus. The Limit, in the form of a wasteload allocation (WLA) must be met by March 1, 2019. Compliance is required during the critical season, which is defined as the months of May, July, August and September.

At the time of this writing, (May 13, 2015), the means with which compliance with the Wenatchee River Dissolved Oxygen and pH TMDL has not yet been established. The means of compliance monitoring with the TMDL will be added to the permit either through a major permit modification or permit reissuance, once the monitoring protocols for T-Phosphorus has been determined.

This fact sheet addendum accompanies the permit, which Ecology proposes to reauthorize for the discharge of wastewater to Wenatchee River. The previous fact sheet explains the basis for the discharge limits and conditions of the reauthorized permit and remains as part of the administrative record.

4. Permit Limits and Conditions

The reauthorized permit is substantially identical to the previous permit issued on March 8, 2010 with a few exceptions identified below. Ecology removed the completed report requirements that do not require additional or continued assessment.

The proposed reauthorized permit includes:

- The discharge limits and conditions in effect at the time of expiration of the previous permit.
- Changes to the submittal dates for reports from those in the previous permit.

- Adjusted dates for the other necessary compliance and submittal requirements carried over from the past permit.
- The Permittee is required to meet the Wenatchee River Multi-Parameter TMDL—Dissolved Oxygen and pH by March 1, 2019. The WLA Limit, in the form of a wasteload allocation (WLA), which must be met by March 1, 2019. The WLA for Peshastin is no more than 37 grams of Total Phosphorus per day during the critical season, which includes the months of March, April, May, July, August, and September. The facility plan also calls for the construction of a lift station at the Dryden facility, decommissioning of the Dryden drainfield, and construction of 3.5 miles of pressurized sewer line, which will cross the Wenatchee River at three bridge locations and one bridge crossing above Peshastin Creek.

5. Public Process

Ecology must provide public notice the availability of the draft reauthorized permit at least 30 days before it reissues the permit [Washington Administrative Code (WAC) 173-220-050]. Ecology invites you to review and comment on its decision to reauthorize the permit (see **Appendix A-Public Involvement Information** for more detail on the Public Notice procedures).

After the public comment period has closed, Ecology will prepare a *Response to Comments* document and attach it to this fact sheet addendum. Ecology will respond to each comment and describe the resultant changes to the permit in this document. Ecology sends a copy of the *Response to Comments* to all parties that submitted comments.

6. Permit Appeal Process

Appendix B describes the permit appeal process.

7. Recommendation for Permit Issuance

Ecology proposes to reissue this permit for 3 years.

Appendix A--Public Involvement Information

Ecology proposes to reissue a permit to the Peshastin POTW. The permit includes wastewater discharge limits and other conditions. This fact sheet describes the facility and Ecology's reasons for requiring permit conditions.

Ecology will place a Public Notice of Draft Reauthorization on July 8, 2015 in the Leavenworth Echo and Cashmere Valley Record to inform the public and to invite comment on the proposed draft National Pollutant Discharge Elimination System permit and fact sheet addendum.

The notice:

- Tells where copies of the draft permit and fact sheet are available for public evaluation (a local public library, the closest regional or field office, posted on our website).
- Offers to provide the documents in an alternate format to accommodate special needs.
- Asks people to tell us how well the proposed permit would protect the receiving water.
- Invites people to suggest fairer conditions, limits, and requirements for the permit.
- Invites comments on Ecology's determination of compliance with antidegradation rules.
- Urges people to submit their comments, in writing, before the end of the comment period.
- Tells how to request a public hearing about the proposed NPDES permit.
- Explains the next step(s) in the permitting process.

NOTICE:	ANNOUNCEMENT OF AVAILABILITY OF DRAFT REAUTHORIZATION PERMIT
PERMIT NO.:	WA0052175
APPLICANT:	CHELAN COUNTY PUD #1
FACILITY:	PESHASTIN POTW

Chelan County PUD #1 has applied for renewal of National Pollutant Discharge Elimination System (NPDES) Permit No. WA0052175 for the Peshastin POTW in accordance with the provisions of Chapter 90.48 Revised Code of Washington (RCW), Chapter 173-220 Washington Administrative Code (WAC), and the Federal Clean Water Act.

Following evaluation of the application and other available information, a draft permit has been developed which would allow the discharge of municipal wastewater to the Wenatchee River at River Mile 20.7 from its facility located at 10395 Mill Road, Peshastin, Washington 98847. All discharges to be in compliance with the Department of Ecology's Water Quality Standards for a permit to be issued.

A tentative determination has been made to reauthorize this permit based on the effluent limitations and special permit conditions that will prevent and control pollution. A final determination will not be made until all timely comments received in response to this notice have been evaluated.

PUBLIC COMMENT AND INFORMATION

The draft permit and fact sheet addendum may be viewed at the Department of Ecology (Department) website: <http://www.ecy.wa.gov/programs/wq/permits/index.html>. The application and other related documents are available at Ecology's Central Regional Office for inspection and copying between the hours of 8:00 a.m. and 4:30 p.m., weekdays. To obtain a copy or to arrange to view copies at the Central Regional Office, please call 509/575-2490 or write to the address below.

Interested persons are invited to submit written comments regarding the proposed permit. All comments must be submitted by August 8, 2015 to be considered for the final determination. E-mail comments should be sent to cynthia.huwe@ecy.wa.gov. Comments should be sent to:

Cindy Huwe, Permit Coordinator
Department of Ecology
Central Regional Office
1250 West Alder Street
Union Gap, WA 98903-0009

Any interested party may request a public hearing on the proposed permit within 30 days of the publication date of this notice. The request for a hearing shall state the interest of the party and the reasons why a hearing is necessary. The request should be sent to the above address. Ecology will hold a hearing if it determines that there is significant public interest. If a hearing is to be held, public notice will be published at least 30 days in advance of the hearing date. Any party responding to this notice with comments will be mailed a copy of a hearing public notice.

If you require special accommodations or need this document in a format for the visually impaired, call Cindy Huwe at 509-457-7105. Persons with hearing loss can call 711 for Washington Relay Service. Persons with a speech disability can call 877-833-6341.

Publication date of this Notice is July 8, 2015.

Ecology has published a document entitled *Frequently Asked Questions about Effective Public Commenting*, which is available on our website at <http://www.ecy.wa.gov/biblio/0307023.html>.

You may obtain further information from Ecology by telephone, 509/457-7105, or by writing to the address listed below.

Water Quality Permit Coordinator
Department of Ecology
Central Regional Office
1250 West Alder Street
Union Gap, WA 98903-0009

The primary author of this permit and fact sheet is Richard Marcley.

Appendix B --Your Right to Appeal

You have a right to appeal this permit to the Pollution Control Hearing Board (PCHB) within 30 days of the date of receipt of the final permit. The appeal process is governed by chapter 43.21B RCW and chapter 371-08 WAC. "Date of receipt" is defined in RCW 43.21B.001(2) (see glossary).

To appeal you must do the following within 30 days of the date of receipt of this permit:

- File your appeal and a copy of this permit with the PCHB (see addresses below). Filing means actual receipt by the PCHB during regular business hours.
- Serve a copy of your appeal and this permit on Ecology in paper form - by mail or in person. (See addresses below.) E-mail is not accepted.

You must also comply with other applicable requirements in chapter 43.21B RCW and chapter 371-08 WAC.

ADDRESS AND LOCATION INFORMATION

Street Addresses	Mailing Addresses
Department of Ecology Attn: Appeals Processing Desk 300 Desmond Drive SE Lacey, WA 98503 Pollution Control Hearings Board 1111 Israel RD SW STE 301 Tumwater, WA 98501	Department of Ecology Attn: Appeals Processing Desk PO Box 47608 Olympia, WA 98504-7608 Pollution Control Hearings Board PO Box 40903 Olympia, WA 98504-0903

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Appendix C – DMR Data

Effluent DMR DATA 1/2011 – 03/2016 (Note flow is in MGD not GPD)

Parameter	Ammonia (Total)	Ammonia (Total)	Biochemical Oxygen Demand (BOD5)	Biochemical Oxygen Demand (BOD5)	Biochemical Oxygen Demand (BOD5)	Biochemical Oxygen Demand (BOD5)	Fecal Coliform	Fecal Coliform	Flow	Flow	Phosphorus (Total)	Solids (Residue) (Total suspended (TSS))	Solids (Residue) (Total suspended (TSS))	Solids (Residue) (Total suspended (TSS))	Solids (Residue) (Total suspended (TSS))
Units	Lbs/Day	Milligrams/L (mg/L)	Lbs/Day	Lbs/Day	Milligrams/L (mg/L)	Milligrams/L (mg/L)	#/100ml	#/100ml	Million Gallons/Day (MGD)	Million Gallons/Day (MGD)	Milligrams/L (mg/L)	Lbs/Day	Lbs/Day	Milligrams/L (mg/L)	Milligrams/L (mg/L)
Statistical Base	Maximum	Maximum	Average Monthly	Weekly Average	Average Monthly	Weekly Average	Geometric Mean	Weekly Geometric Mean	Average	Maximum	Maximum	Average Monthly	Weekly Average	Average Monthly	Weekly Average
Limits	-/-	-/-	-/ 27.5	-/ 41.3	-/ 30	-/ 45	-/ 200	-/ 400	-/-	-/-	-/-	-/ 27.5	-/ 41.3	-/ 30	-/ 45
Benchmarks	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Design Limit															
Date	Value	Value	Value	Value	Value	Value	Value	Value	Value	Value	Value	Value	Value	Value	Value
1/1/2011	0.3	0.7	0.89	1.1	1.45	1.9	1.0	1	0.046	0.068	3.6	0.37	0.7	0.8	1.6
2/1/2011	0.2	0.3	1	2	2	3	1.0	1	0.048	0.082	6.67	1	2	1	3
3/1/2011	0.06	0.21	0.5	0.6	1.2	1.7	1.0	5	0.042	0.064	7.3	0.1	0.4	0.3	1.4
4/1/2011	0.04	0.18	0.6	1	2.2	3.2	4.0	32	0.033	0.046	7.79	0.2	0.4	0.8	1.4
5/1/2011	0.06	0.22	0.7	0.9	2.4	2.6	3.4	136	0.033	0.048	6.7	0.5	0.6	1.8	2.6
6/1/2011	0.1	0.21	0.7	1	2	3	1.0	1	0.038	0.058	7.63	0.4	1	1	3
7/1/2011	0.1	0.2	0.5	0.7	1.5	2.2	1.0	1	0.033	0.062	10	0.2	0.3	0.5	0.8
8/1/2011	0.3	0.7	0.5	0.8	3.1	5	1.0	1	0.028	0.044	5.64	0.2	0.3	1.3	2.8
9/1/2011	0.1	0.2	0.56	0.6	1.1	1.8	2.4	7	0.056	0.086	4.85	0.74	1.5	1.52	2.8
10/1/2011	0.4	0.65	0.78	1.51	1.31	2.39	1.7	8	0.063	0.087	3.95	3.75	9.51	6.45	15
11/1/2011	0.3	0.4	1.325	1.9	2.25	3	1.0	1	0.063	0.086	3.67	2.525	4.1	4.25	7
12/1/2011	0.2	0.2	1.8	3.1	2.5	4	1.1	2	0.064	0.095	5.92	3	4	4.2	6
1/1/2012	0.15	0.23	1.275	1.8	2.5	3	1.9	14	0.055	0.086	5.95	2.9	4.4	5.25	9
2/1/2012	0.2	0.3	0.9	1.4	1.45	1.8	1.2	2	0.061	0.087	10.1	1.475	3.4	2	4
3/1/2012	2.2	3.8	1.64	2.3	2.66	3.7	1.6	3	0.060	0.089	5.56	3.24	3.7	5.4	6
4/1/2012	0.1	0.31	0.675	1	2.175	3.2	8.1	11	0.034	0.054	5.77	1.175	2.1	4	7
5/1/2012	0.1	0.2	0.8	1.8	3.08	6	3.5	10	0.030	0.057	5.5	1.44	3.5	5.4	12
6/1/2012	0.1	0.3	1.125	2.5	4.875	11	1.7	3	0.028	0.039	6.49	2.925	5	12.25	22
7/1/2012	0.5	0.2	0.65	1.3	2.4	5.2	2.2	5	0.035	0.043	8.66	1.325	2.3	4.5	9
8/1/2012	0.05	0.28	0.54	0.7	2.34	3.1	7.9	14	0.030	0.053	7.67	0.84	1.2	3.6	5
9/1/2012	0.2	0.29	1.475	3	2.7	5.3	5.8	15	0.057	0.084	5.89	2.075	3.9	4.25	9
10/1/2012	0.2	0.29	1.04	2	1.9	3.2	1.0	1	0.062	0.097	6.56	1.22	1.8	2	3
11/1/2012	0.2	0.32	1.76	2.4	2.9	3.9	1.9	7	0.055	0.094	5.48	3.2	5.2	5.6	9
12/1/2012	11.9	24.1	0.9	1.1	1.9	2.8	3.0	9	0.051	0.081	5.63	1.4	2.4	3	6
1/1/2013	8.8	19.6	0.7	1.1	1.4	2.2	2.0	2	0.051	0.079	5.6	1.8	2.8	3.3	5
2/1/2013	10.1	19.6	1.5	2	4	7.6	4.0	19	0.051	0.081	5.25	1.8	3.7	4	8
3/1/2013	14.5	31	1.3	3.3	3	7.5	9.0	21	0.04	0.059	8.08	3.3	7.5	7.5	17
4/1/2013	0.11	0.3	0.5	0.6	2.3	2.9	2.3	6	0.026	0.042	8.1	0.5	0.7	2	3
5/1/2013	0.06	0.3	0.5	0.7	2.3	3.5	4.0	16	0.025	0.037	6.52	1	2.9	4.4	11
6/1/2013	0.1	0.32	0.6	0.9	2.4	3.2	2.0	4	0.027	0.038	7.35	0.9	1.5	3.8	6
7/1/2013	0.6	0.2	0.8	1.8	2	3	1.0	1	0.034	0.047	7.84	0.6	0.9	2	3
8/1/2013	0.1	0.3	0.4	1.3	1.6	5.2	3.0	5	0.031	0.044	6.46	0.3	2.3	1	9
9/1/2013	0.2	0.3	1	1.3	1.8	5.2	2.0	5	0.036	0.072	10	1.1	2.3	2	9
10/1/2013	0.2	0.32	1.1	1.5	2.06	3.2	3.0	12	0.054	0.071	9.34	1.06	1.6	1.6	3
11/1/2013	0.1	0.27	0.75	1.3	1.65	5.2	3.5	12	0.049	0.066	5.58	0.85	2.3	1.75	9
12/1/2013	0.3	0.6	0.5	1.3	1.4	5.2	2.0	5	0.041	0.055	9.55	1	2.3	3	9
1/1/2014	0.02	0.3	1.6	0.8	3.1	1.9	1.2	2	0.047	0.065	7.72	1.5	0.9	4	2.2
2/1/2014	0.2	0.4	0.9	1.2	2	3.2	2.0	5	0.045	0.06	7.52	1.4	1.4	4	8
3/1/2014	0.2	0.3	1.8	3.3	3.9	6.5	2.0	8	0.042	0.061	9.84	1.2	2	3	5
4/1/2014	0.1	0.3	0.5	0.8	2.1	3.3	1.0	1	0.028	0.038	5.73	0.6	1.4	3	6
5/1/2014	0.1	0.3	0.6	0.8	2.4	3.1	2.0	4	0.028	0.038	6.48	0.7	1.2	3	5
6/1/2014	0.1	0.2	0.8	1.6	1.6	2.7	2.0	6	0.029	0.046	7.27	1.1	2.6	3.8	8
7/1/2014	0.2	0.4	0.4	0.6	1.5	2.5	11.0	3.8	0.037	0.056	5.41	1.6	3.3	5	9
8/1/2014	0.1	0.4	0.7	1	2	2.3	2.0	7	0.041	0.073	7.25	1.1	1.5	3	5
9/1/2014	0	0.2	1.6	2.3	2.3	3.2	11.0	4	0.067	0.089	8.89	2.6	4.9	4	7
10/1/2014	0.3	0.3	1.5	2.7	2.1	3.7	2.0	5	0.072	0.106	6.42	1.5	2.7	2	3
11/1/2014	0.2	0.4	1.5	2.1	3.1	3.7	5.0	17	0.057	0.09	2.9	4.3	6.2	8	11
12/1/2014	0.2	0.3	1.5	1.3	2.8	5.2	8.0	5	0.052	0.079	3.68	3	2.3	7	9
1/1/2015	0.3	0.6	1.7	3.2	3.1	5.6	2.0	7	0.057	0.085	6.02	1.6	2.5	2.8	4
2/1/2015	0.2	0.4	3.1	5.1	5.6	8.4	3.0	13	0.053	0.079	3.51	3.7	7.3	6.5	12
3/1/2015	0.16	0.34	2.6	4.4	5.22	8.9	3.0	15	0.04	0.07	1.82	2.35	3.5	4.25	7
4/1/2015	0.13	0.26	1.16	1.6	2.68	3.4	4.5	23	0.046	0.067	4.74	2.64	7.6	5.8	15
5/1/2015	0.11	0.33	0.925	1.3	2.35	3.4	1.8	11	0.040	0.054	7.78	0.4	0.4	1	1
6/1/2015	0.4	0.16	0.7	1.5	2.375	4.9	3.2	18	0.034	0.046	13.2	0.675	1.5	2.25	5
7/1/2015	0.1	0.36	0.54	0.7	1.86	2.6	1.4	3	0.032	0.045	5.51	1.08	2.5	4	10
8/1/2015	0.29	0.44	1.625	2.4	2.8	4.4	7.5	21	0.059	0.099	6.45	6.625	17	11	26
9/1/2015	0.32	0.32	4.075	5.9	4.35	6.1	7.8	31	0.095	0.122	2.91	10.4	17	11	17
10/1/2015	6.2	0.78	4.6	7.8	5.38	8.7	3.8	23	0.083	0.125	1.59	8.32	15	9.6	19
11/1/2015	0.2	0.27	2.325	3.2	2.825	3.7	2.8	21	0.073	0.103	0.79	2.225	3.8	2.75	5
12/1/2015	0.25	0.36	3.3	5.3	4.36	7.8	2.9	16	0.071	0.106	0.41	2.6	5.3	3.4	6
1/1/2016	0.54	0.72	5.175	6.9	6.6	8.3	8.1	19	0.072	0.121	0.42	5.675	9	7.25	12
2/1/2016	0.41	0.49	2.4	3.2	2.925	4	5.9	17	0.074	0.111	2.24	8.75	15	10.75	20
3/1/2016	0.31	0.51	2.38	3	3.96	5.1	4.5	11	0.060	0.084	0.46	9.34	27	15.2	45
Min	0	0.16	0.4	0.6	1.1	1.7	1	1	0.025	0.037	0.41	0.1	0.3	0.3	0.8
Max	14.5	31	5.175	7.8	6.6	11	11	136	0.095	0.125	13.2	10.4	27	15.2	45
Avg	1.0	1.9	1.3	2.0	2.6	4.2	3.3	11.1	0.0	0.1	6.0	2.2	4.1	4.21	8.3
STDV	2.9	5.8	1.0	1.5	1.1	2.0	2.6	17.7	0.0	0.0	2.6	2.3	4.8	3.8	7
95th %	8.5	18.0	3.3	5.3	5.2	8.4	8.1	23.0	0.07326	0.1105	10.0	8.2	15.0	11.0	19.9

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Effluent DMR DATA 5/2010 – 1/2015 Continued

Parameter	Temperature (Measured)	Temperature (Measured)	Temperature (Measured)	pH	pH
Units	Degrees C	Degrees C	Degrees C	Standard Units	Standard Units
Statistical Base	Average	Maximum	Critical Season	Maximum	Minimum
Limits	- / -	- / -		- / 9	6 / -
Benchmarks	- / -	- / -		- / -	- / -
Design Limit					
Date	Value	Value		Value	Value
1/1/2011	10.7	11		7.2	7.1
2/1/2011	10.7	11		7.3	7.1
3/1/2011	11.3	12		7.31	7.17
4/1/2011	13.7	15		7.2	7
5/1/2011	16.9	18		7.3	7.1
6/1/2011	19	20		7.24	7.07
7/1/2011	21	21	21	7.21	7.09
8/1/2011	22	23	23	7.4	7.08
9/1/2011	19.4	22	22	7.45	7.15
10/1/2011	16.6	18		7.5	6.6
11/1/2011	13.3	15		7.6	7.3
12/1/2011	11.7	16		7.2	7
1/1/2012	11.0	13		7.28	7
2/1/2012	10.9	12		7.2	7
3/1/2012	11.6	13		7.2	6.97
4/1/2012	13.2	15		7.33	6.91
5/1/2012	16.8	19		7.1	6.9
6/1/2012	19.5	20		7.22	7.13
7/1/2012	22.1	23	23	7.23	7.01
8/1/2012	23.9	24	24	7.34	7.08
9/1/2012	21.2	24	24	7.28	7.22
10/1/2012	17.3	19		7.48	7.24
11/1/2012	14.7	16		7.81	7.39
12/1/2012	12	13		7.2	7.1
1/1/2013	11	12		7.32	7.01
2/1/2013	11	11		7.32	7.1
3/1/2013	13	11		7.25	7.05
4/1/2013	12	15		7.14	6.96
5/1/2013	17	18		7.12	6.89
6/1/2013	14	20		7.06	6.97
7/1/2013	21.6	23	23	7.22	7.11
8/1/2013	24	24	24	7.3	6.98
9/1/2013	22.3	24	24	7.12	7.03
10/1/2013	17.2174	20		7.34	7.21
11/1/2013	14.5	16		7.25	7.01
12/1/2013	11.2	13		7.09	7.04
1/1/2014	11.7	12		7.16	7.04
2/1/2014	10.9	11		7.16	7.07
3/1/2014	11.9	13		7.31	7.14
4/1/2014	14.3	15		7.18	6.98
5/1/2014	17.2	19		7.31	7.11
6/1/2014	20.5	22		7.12	7.04
7/1/2014	22.8	24	24	7.23	7.01
8/1/2014	23.8	24	24	7.21	7.11
9/1/2014	21.9	23.1	23.1	7.31	7.1
10/1/2014	19.1	20		7.23	7.07
11/1/2014	14.2	17		7.23	7.01
12/1/2014	10.7	12		7.39	7.25
1/1/2015	11	12		7.34	7.2
2/1/2015	12	13		7.25	7.01
3/1/2015	14	15		7.22	7.04
4/1/2015	15.6818	17		7.36	7.12
5/1/2015	18.9048	20		7.33	6.99
6/1/2015	23	23		7.11	6.99
7/1/2015	23.9565	25	25	7.23	7.01
8/1/2015	22.6	24	24	7.23	7.11
9/1/2015	18.5909	20	20	7.16	7.04
10/1/2015	17.7273	18		7.32	6.98
11/1/2015	13.6667	15		7.13	7.03
12/1/2015	11.1739	12		7.18	7
1/1/2016	11.9	12		7.28	7.18
2/1/2016	12.2857	13		7.22	7.02
3/1/2016	12.9565	13		7.23	7.03
Min	10.7	11	11	7.06	
Max	24	25	25		7.39
Avg	16	17.21	17.21		
STDV	14.5	17	17		
95th %	23.72	24	24		

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Effluent DMR DATA 5/2010 – 1/2015 Annual Monitoring Data

	Permit Application Yearly				
Monitoring Point 002	Monitoring				
	Hardness	Nitrate + Nitrite (Total)	Oil & Grease (Total recoverable, FOG,HEM)	TKN	Total Dissolved Solids
Parameter Effluent	Milligrams/L (mg/L)	Milligrams/L (mg/L)	Milligrams/L (mg/L)	Milligrams/L (mg/L)	Milligrams/L (mg/L)
Units	Maximum	Maximum	Maximum	Maximum	Maximum
Statistical Base	Maximum	Maximum	Maximum	Maximum	Maximum
Date	Value	Value	Value	Value	Value
6/1/2010	164	m	m		6.4 m
11/1/2010			<1.4		341.9
1/1/2011	m	m		1.88	m
9/1/2011	178	10.358	1.8	1.5	372.5
10/11/2012	168	9.8	1.4	1.2	386
12/30/2013	156	9.53	1.9	1.9	392
12/17/2014	131	9.6	1.4	1.8	426
Min	131.0	9.5	1.4	1.2	341.9
Max	178.0	10.4	1.9	6.4	426.0
Avg	159.4	9.8	1.6	2.4	383.7
95th %	177.3	178.3	179.3	180.3	181.3

Instructions

Reasonable Potential Calculation

Facility	Pashastin
Water Body Type	Freshwater
Rec. Water Hardness	14 mg/l

6

Dilution Factors:	Acute	Chronic
Aquatic Life	59.0	242.0
Human Health Carcinogenic		1.0
Human Health Non-Carcinogenic		1.0

[illegible]

Aquatic Life Reasonable Potential

Aquatic Life Reasonable Potential	
Effluent percentile value	0.950
$s^2 = \ln(CV^2 + 1)$	0.555
$P_n = (1 - \text{confidence level})^{1/n}$	0.954
Multiplier	1.00
Max concentration (ug/L) at edge of...	525
Acute	525
Chronic	128
Reasonable Potential? Limit Required?	NO

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Influent DMR Data 1/2011 – 3/2016

Monitoring Point IN1	Influent							
Parameter	Biochemical Oxygen Demand (BOD5)	Biochemical Oxygen Demand (BOD5)	Biochemical Oxygen Demand (BOD5)	Biochemical Oxygen Demand (BOD5)	Solids (Residue) (Total suspended (TSS))	Solids (Residue) (Total suspended (TSS))	Solids (Residue) (Total suspended (TSS))	Solids (Residue) (Total suspended (TSS))
Units	Lbs/Day	Lbs/Day	Milligrams/L (mg/L)	Milligrams/L (mg/L)	Lbs/Day	Lbs/Day	Milligrams/L (mg/L)	Milligrams/L (mg/L)
Statistical Base	Average	Maximum	Average	Maximum	Average	Maximum	Average	Maximum
Limits	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Benchmarks	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Design Limit								
Date	Value	Value	Value	Value	Value	Value	Value	Value
1/1/2011	55	79	147	168	27	44	71	102
2/1/2011	80	174	204	353	39	63	99	127
3/1/2011	57.8	89.1	163.9	220.8	33.5	77.4	94.9	160
4/1/2011	60	96	221	360	24	47	88	142
5/1/2011	46	72	170	195	19	25	72	80
6/1/2011	50	73	181	324	23	38	83	167
7/1/2011	39	61	146	260	27	35	100	132
8/1/2011	39	54	175	233	18	25	78	98
9/1/2011	85.8	122	173.6	195	40.2	54	84.2	116
10/1/2011	129.75	156	232.75	304	79.75	144	139.75	233
11/1/2011	67	73	112.25	129	34.5	49	56.5	86
12/1/2011	64	105	122	151	39.8	71	62.4	116
1/1/2012	108.5	189	208.5	354	43.5	56	85	100
2/1/2012	122	151	219	270	56.25	113	96	172
3/1/2012	118.2	137	223	270	119.8	208	226.6	362
4/1/2012	50.75	57	183.5	228	18.25	23	66.5	88
5/1/2012	43.4	55	169.8	213	13.76	16.8	53.8	63
6/1/2012	32.25	40	136	172	13.75	18	57.5	78
7/1/2012	43.625	57.7	151	223	31.925	60.4	110	207
8/1/2012	28.86	37.8	127.6	218	19.06	27.8	79.8	97
9/1/2012	94.25	124	168	222	70.175	102.8	131	184
10/1/2012	80.6	104	161.6	196	112	251	187	407
11/1/2012	105.6	135	194.8	252	96.4	141	175.4	238
12/1/2012	78	128	184	229	43	104	101	214
1/1/2013	61	83	145	199	35	58	93	119
2/1/2013	68	83	163	213	35	57	84	113
3/1/2013	51	77	149	192	26	40	75	100
4/1/2013	54	71	239	284	13	15	56	65
5/1/2013	34	40	158	187	12	20	55	87
6/1/2013	32	32	137	154	18	22	78	102
7/1/2013	52.4	64	182	208	21.4	30	74	95
8/1/2013	47.2	57	174	229	18	34	66	108
9/1/2013	69.9	91	149	167	31.6	51	67	104
10/1/2013	94.4	122	185.2	225	27.6	41	54	74
11/1/2013	94.25	114	198	232	35	42	76.75	91
12/1/2013	50.7	70	148	156	18.7	24	55	61
1/1/2014	65.1	89	172	192	24.5	36	65	95
2/1/2014	72.5	84	175	202	36.8	64	88	153
3/1/2014	80.3	104	197	235	24.5	31	61	71
4/1/2014	52.8	63	211	254	12.5	16.2	50	54
5/1/2014	45.6	65	177	245	12	15	46	55
6/1/2014	37.9	44	158	178	13.6	19	58	81
7/1/2014	38.6	56	141	167	20.8	33	70	94
8/1/2014	53.8	82	150	182	19.8	33	56	67
9/1/2014	86.3	111	130	161	32.8	42	51	83
10/1/2014	90.2	104	141	162	33	41	51	67
11/1/2014	74.5	100	167	207	70	92	127	168
12/1/2014	87	140	163	243	62	81	115	149
1/1/2015	85	137	182	235	65	88	139	162
2/1/2015	81	155	188	282	41	92	94	167
3/1/2015	82.2	96	177	191	30.5	34	67.2	76
4/1/2015	79.4	117	177.6	223	25.4	36	61.6	69
5/1/2015	61.5	77	165	206	20.75	22	57.5	64
6/1/2015	48	70	176	228	25	51	98.5	205
7/1/2015	44.2	61	161.2	186	15.8	18	61	81
8/1/2015	73	100	125.75	155	43	57	76.25	87
9/1/2015	118.5	139	136	151	67.5	81	78	88
10/1/2015	117	161	139	186	55.2	68	65.6	76
11/1/2015	117	136	149	176	51	60	64.25	71
12/1/2015	88.8	118	121.2	140	45.4	58	61.6	69
1/1/2016	114.5	154	160.25	185	46.5	52	66	85
2/1/2016	101.25	131	143.5	173	48.75	62	68.25	81
3/1/2016	99	112	170	200	38.8	41	66.8	72
Min	28.86	32	112.25	129	12	15	46	54
Max	129.75	189	239	360	119.8	251	226.6	407
Avg	71.16	96.5	167.56	214.77	36.76	56.37	82.47	118.7
Median	68	91	167	207	31.93	44	72	95
95th %	118.08	155.9	220.8	322	78.79	138.2	139.68	231.1

APPENDIX D--RESPONSE TO COMMENTS

Public Utility District #1 of Chelan County Comments:

Re: COMMUNITY OF PESHASTIN DRAFT NPDES PERMIT REVIEW COMMENTS

Dear Ms. Huwe:

Thank you for the opportunity to review the Draft NPDES permit and fact sheet for our Peshastin wastewater facility. Our comments are summarized below:

Section S2-A – Monitoring Schedule

The Draft Permit requires the district calculate percent removal of BOD₅ and TSS in the final effluent. The treatment process begins in the collection system where a considerable amount of BOD₅ and TSS are removed in the septic tanks serving District customers. Since it is not practical or feasible to determine percent removal of over 120 septic tanks, the Peshastin facility has never been required to calculate percent removal in the past. For this reason, we request the requirement to calculate BOD₅ and TSS percent removals be removed from the final permit.

Ecology's Comments:

Ecology agrees with the Chelan PUD assessment and therefore the removal rate calculation requirement for BOD and TSS is deleted from the permit.

Public Utility District #1 of Chelan County Comments continued:

Fecal Coliform

Ecology revised the fecal coliform limits from technology based limitations to water quality based limitations. We found no analysis in the Permit or Fact Sheet whether the technology based limits would be met at the end of the mixing zone. Rather, the change appears to be based on the facility's ability to meet the water quality based limitations according to historic operational data.

The design criteria of the Peshastin UV disinfection system is summarized below.

Parameter	Criteria
effluent source	extended air activated sludge
flow rate	370 gpm
quantity of lamp banks for treatment	1
quantity of lamp banks for redundancy	1
total quantity of lamp banks	2
Effluent quality (average monthly)	200 cfu/100 ml

Historic flows have been well below the design criteria for the plant. For example, the design effluent discharge from the SBR biological treatment system is 370 gpm. In comparison, the facility currently discharges approximately 150 gpm. The reduced rate of flow through the UV system exposes microorganisms to over two times the UV dose required to achieve the design effluent quality of 200 cfu/100 ml.

The UV system utilizes two banks of low pressure UV lamps. One bank of lamps is required to disinfect the design flow to 200 cfu/100 ml. The second bank is provided for redundancy. We have found that when a bank of lamps is not energized, the lamp sleeves become fouled very quickly. To prevent this rapid fouling and need for labor-intensive cleaning, the system is operated with both banks of lamps simultaneously.

The design flow rate through the UV system is approximately 2.5 times greater than the current rate. Thus, at the current flow rate of 150 gpm, the UV system is providing a dose approximately 2.5 times greater than what is necessary to achieve the technology based fecal limitation. With both banks of lamps operating, the UV system is providing double the dose necessary to achieve the technology based fecal limitation. These two factors combined provide a UV dose approximately five times what is necessary to achieve the design technology based fecal limitation.

It is important to recognize that the Peshastin UV system provides this elevated dose because (1) the plant is currently hydraulically under loaded and (2) the redundant bank of lamps is operated under normal operating conditions. If the permit limit were revised to 100 cfu/100 ml, the UV disinfection system would no longer be capable of treating the design flow while meeting the reliability requirements for the UV disinfection system. By reducing the permit limits, Ecology would effectively be reducing the capacity of the Peshastin wastewater facility.

It is also important to understand that regardless of the permit limits, the District will continue to operate the UV system in the same manner it has in the past. We anticipate effluent fecal concentrations will be well below the water quality based limit the majority of the time. However, the frequency the plant is out of compliance with the limits proposed by Ecology would increase.

In summary, reducing the effluent fecal limits would effectively reduce the hydraulic capacity of the treatment plant and increase the frequency of noncompliance while providing no discernible environmental benefit or improvement in water quality. For these reasons, we request Ecology replace the proposed effluent fecal limitations with the original average monthly limitations of 200 cfu/100 ml.

Please contact me at (509) 661-4131 if you have any questions or require additional information.

Sincerely,

Ron Slabaugh, P.E.
 Water Resources Manager

Ecology's Comments:

Ecology finds the Chelan PUD rationale reasonable. Based on a simple mass balance analysis using four times the highest ambient value, an effluent discharge containing a maximum value of 400 colonies per ml at the chronic dilution of 242:1 or the acute dilution of 59:1 will not exceed the weekly average limit of 200. The average monthly limit is predicted to be exceeded by 5 colonies based on an ambient fecal coliform load four times that observed. Therefore, Ecology will reestablish the former fecal coliform limits for the effluent discharge at an average monthly of 200 colonies per ml and a maximum monthly colonies per ml at 400.

Bacteriological Mass Balance Model Peshastin POTW to the Wenatchee River					
CHRONIC DILUTION 247 :1					
Dilution Calculator	Effluent colonies per ml	Dilution Calculator	(4 times) Ambient colonies per ml	Final conc	Dilution factor
40.6	400	10000	100	101	247
			95th %tile		
177	400	10000	100	105	57

USEPA Comments:



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue, Suite 900
Seattle, WA 98101-3140

OFFICE OF
WATER AND
WATERSHEDS

August 7, 2015

Ms. Cindy Huwe, Permits Coordinator
Department of Ecology, Central Regional Office
15 West Yakima Avenue, Suite 200
Yakima, WA 98902

(sent to: cynthia.huwe@ecy.wa.gov)

Re: United States Environmental Protection Agency Comments
Draft National Pollutant Discharge Elimination System (NPDES) Permit and Fact Sheet
Chelan County PUD No. 1 – Peshastin POTW, Permit No. WA0052175

Dear Ms. Huwe:

The U.S. Environmental Protection Agency reviewed the above-referenced draft permit pursuant to the NPDES Memorandum of Agreement between the Washington Department of Ecology and United States Environmental Protection Agency Region 10 (MOA) and the EPA's obligation to oversee implementation of the NPDES programs by delegated states. The EPA reviewed the draft permit for consistency with the Clean Water Act and NPDES implementing regulations and with the Department of Ecology's (Ecology) regulations and permit writing guidance.

Ecology must incorporate effluent limits in the permit that are consistent with the wasteload allocation (WLA) in the EPA-approved total maximum daily load (TMDL) [40 CFR 122.44(d)(1)(vii)]. The EPA approved the Wenatchee River Watershed Dissolved Oxygen and pH TMDL and subsequent modification.¹ Given the status of the approved TMDL, it is unacceptable to delay implementation of effluent limits for total phosphorus consistent with the assigned WLA in the TMDL. Ecology included the effluent limits consistent with the TMDL WLA in the permit's limit table (permit, page 5), but states in footnote g, "*T(otai)- Phosphorus value constitutes the Wasteload Allocation contained in the Wenatchee River Watershed Dissolved Oxygen and pH TMDL. Table 16 on Page 48. Not effective this permit cycle. Permit limits and calculation method will be added at the time of permit reissuance or major permit modification.*" The EPA requires that the effluent limits from the TMDL WLA be an enforceable condition of the permit upon reissuance.

Recognizing that the permittee may be unable to meet the total phosphorus limits upon reissuance, Ecology may incorporate a compliance schedule into the permit. Specifically, NPDES regulations at 40 CFR 122.47 allow permit writers to establish schedules of compliance to give permittees additional time to achieve compliance with the CWA and applicable regulations. Compliance schedules must meet the requirement of 40 CFR 122.47 and permits

¹ Department of Ecology, Wenatchee River Watershed Dissolved Oxygen and pH TMDL, April 2009.
<<https://fortress.wa.gov/ecy/publications/documents/0810062.pdf>> August 6, 2015

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must include interim effluent limits that are effective upon issuance until the final effluent limits can be met. The regulation requires compliance "as soon as possible", interim dates not to exceed 1 year or progress reports, and report(s) no later than 14 days following each interim date or final date of compliance. EPA's Permit Writers' Manual also references "the Hanlon Memo" as providing additional guidance on the use of compliance schedules. [See *Compliance Schedules for Water Quality-Based Effluent Limitations in NPDES Permits* <http://www.epa.gov/npdes/pubs/memo_complianceschedules_may07.pdf>]. The EPA requires that the permit include a compliance schedule with enforceable milestones necessary to meet the final effluent limits for total phosphorus.

The EPA disagrees with Ecology's approach to reauthorize the permit. The EPA is generally concerned about the reissuance of NPDES permits through this type of reauthorization process since it circumvents the more rigorous analysis mandated with reissuance. The EPA believes that it would be prudent to consider changes to water quality standards and permitting guidance since the last permit issuance and to evaluate all of the data required by the permit during the permit term. In this case, the permit required significant changes to the effluent limits to address the WLA imposed by the TMDL. Such changes are counter to Ecology's criteria for permits eligible for reauthorization. Ecology should reissue the permit to address the required changes to the current permit and provide a complete fact sheet to accompany the draft permit.

The fact sheet addendum lacks technical details that describe how the final effluent limits for total phosphorus were developed from the TMDL WLA. The fact sheet should explain the assumptions of the TMDL (e.g. design flow, concentration, etc.) that were used as the basis for limit development. Furthermore, NPDES regulations require limits be expressed as average monthly and maximum daily (or maximum weekly for POTWs) unless impracticable [40 CFR 122.45(d)]. EPA's Technical Support Document (TSD) provide guidance calculating statistically based effluent limits. The fact sheet must either provide calculations for monthly (or weekly) average limits or explain why it is impracticable.

The EPA requests that response to these comments be provided by letter or email to burgess.karen@epa.gov. Please contact me at (206) 553-1755 or by email at lidgard.michael@epa.gov if you have any questions about this letter or related matters, or you may contact Karen Burgess, of my staff, at (206) 553-1644 or burgess.karen@epa.gov.

Sincerely,



Michael J. Lidgard, Manager
NPDES Permits Unit

EPA Comment #1:

Ecology must incorporate effluent limits in the permit that are consistent with the wasteload allocation (WLA) in the EPA-approved total maximum daily load (TMDL) [40 CFR 122.44(d)(1)(vii)]. The EPA approved the Wenatchee River Watershed Dissolved Oxygen and pH TMDL and subsequent modification.¹ Given the status of the approved TMDL, it is unacceptable to delay implementation of effluent limits for total phosphorus consistent with the assigned WLA in the TMDL. Ecology included the effluent limits consistent with the TMDL WLA in the permit's limit table (permit, page 5), but states in footnote g, "*T(otal)-Phosphorus value constitutes the Wasteload Allocation contained in the Wenatchee River Watershed Dissolved Oxygen and pH TMDL, Table 16 on Page 48. Not effective this permit cycle. Permit limits and calculation method will be added at the time of permit reissuance or major permit*

modification." The EPA requires that the effluent limits from the TMDL WLA be an enforceable condition of the permit upon reissuance.

¹ Department of Ecology, Wenatchee River Watershed Dissolved Oxygen and pH TMDL, April 2009. <<https://fortress.wa.gov/ecy/publications/documents/0810062.pdf>> August 6, 2015

Ecology Response to Comment # 1:

The TMDL is not scheduled to go into effect until March 1, 2019. At this time, engineering plans have not been approved for meeting the TMDL. There is no data to assess performance for meeting the phosphorus TMDL requirement. Ecology could remove the WLA from the proposed reissuance of the permit, or in the judgment of the permit writer include the WLA as informative only. The intent of Ecology was to place on notice the scheduled start of phosphorus limitations for the Permittee and general public.

Based on the lack of critical performance data, engineering, and compliance methodology, Ecology believes the only prudent course to address the backlog issue, is to reauthorize the permit for a limited time, and then reissue the permit once all necessary data and compliance strategies are in place by the end of the reauthorized three (3) year permit term.

EPA Comment #2:

Recognizing that the Permittee may be unable to meet the total phosphorus limits upon reissuance, Ecology may incorporate a compliance schedule into the permit. Specifically, NPDES regulations at 40 CFR 122.47 allow permit writers to establish schedules of compliance to give Permittees additional time to achieve compliance with the CWA and applicable regulations. Compliance schedules must meet the requirement of 40 CFR 122.47 and permits must include interim effluent limits that are effective upon issuance until the final effluent limits can be met. The regulation requires compliance "as soon as possible", interim dates not to exceed 1 year or progress reports, and report(s) no later than 14 days following each interim date or final date of compliance. EPA's Permit Writers' Manual also references "the Hanlon Memo" as providing additional guidance on the use of compliance schedules. [See *Compliance Schedules for Water Quality-Based Effluent Limitations in NPDES Permits* <http://www.epa.gov/npdes/pubs/memo_complianceschedules_may07.pdf>]. The EPA requires that the permit include a compliance schedule with enforceable milestones necessary to meet the final effluent limits for total phosphorus.

Ecology Response to Comment #2:

Please refer to comment #1

EPA Comment #3:

The EPA disagrees with Ecology's approach to reauthorize the permit. The EPA is generally concerned about the reissuance of NPDES permits through this type of reauthorization process since it circumvents the more rigorous analysis mandated with reissuance. The EPA believes that it would be prudent to consider changes to water quality standards and permitting guidance since the last permit issuance and to evaluate all of the data required by the permit during the permit term. In this case, the permit required significant changes to the effluent limits to address the WLA imposed by the TMDL. Such changes are counter to Ecology's criteria for permits eligible for reauthorization. Ecology should reissue the permit to address the required changes to the current permit and provide a complete fact sheet to accompany the draft permit.

Ecology Response to Comment #3:

Ecology believes it is prudent to reauthorize the permit because there is no data or engineering with which to make an assessment of the Permittee's ability to meet the TMDL. Ecology will reissue the permit once performance and engineering data is available at the end of the reauthorized permit term. There have been no increases or changes to the treatment train that would warrant more analysis beyond which has already been addressed in the exiting fact sheet.

Ecology will issue a reauthorization of the permit for three (3) years to address backlog considerations and wait until data becomes available during the reauthorized permit term. The only sure thing, at this time, is that WLA becomes effective in March of 2019.

See response to Comment #1.

EPA Comment #4:

The fact sheet addendum lacks technical details that describe how the final effluent limits for total phosphorus were developed from the TMDL WLA. The fact sheet should explain the assumptions of the TMDL (e.g. design flow, concentration, etc.) that were used as the basis for limit development. Furthermore, NPDES regulations require limits be expressed as average monthly and maximum daily (or maximum weekly for POTWs) unless impracticable [40 CFR 122.45(d)]. EPA's Technical Support Document (TSD) provide guidance calculating statistically based effluent limits. The fact sheet must either provide calculations for monthly (or weekly) average limits or explain why it is impracticable.

Ecology Response to Comment #4:

Please see responses to Comments #1 and #3 above.